

S/N 10/559908

In response to the Office Action dated October 14, 2009

**REMARKS**

Favorable reconsideration of this application is requested in view of the following remarks.

**Telephone Interview**

Applicant would like to thank the Examiner for the telephone interview conducted on December 17, 2009 with Lori Frank (Reg. No. 59,297). The discussions of the interview are included in the remarks that follow. During the interview, the differences between the Russell reference and claim 12 were discussed. No agreement was reached.

**35 U.S.C. 102 Rejections**

Claims 12-14 have been rejected under 35 U.S.C. 102(b) as being anticipated by Russell (U.S. Patent No. 6,327,679). Applicant respectfully traverses this rejection.

Claim 12 is directed to an information recording medium where defect management information contains defect location information indicating a location of the defective area and defect status information indicating an attribute of the defect management information. The attribute of the defect status information after physical reformatting of the information recording medium indicates that significant user data is not present in any of the defective area and the substitute area.

An advantage is that due to the configuration of the features of claim 12, in physical reformatting of an information recording medium, the user data is considered to be reset physically merely by changing an attribute of defect status information recorded in a defective area and a substitute area. The defect management information is therefore changed to an attribute indicating that an optical disk has been formatted and significant user data is not present in a defective area or a substitute area. This can be accomplished without performing the generally known method of investigating the defective areas, which is time consuming.

Russell discloses that a failed sector is relocated and an unusable bit is set to indicate that the replacement sector is good, but the data contained within the replacement sector is bad. A read error is generated for subsequent reads to the

S/N 10/559908

In response to the Office Action dated October 14, 2009

replacement sector as long as the unusable bit remains set. The unusable bit is cleared after a write to or reformat of the replacement sector. The replacement sector thereafter becomes a fully functional substitute for the failed sector, containing good data. (col. 2, lines 16-25). Therefore, only the unusable bit is cleared by reformatting, and consequently, it is considered that good data can be written in a replacement sector.

The rejection, at page 6, erroneously indicates that in Russell, "clearing of unusable bit 224 indicates significant user data is not present in any of the defective area and the substitute area. The cited portions of column 5 of Russell clearly explain that the defective portion is fully replaced, meaning that no significant user data can be present there." However, there is nothing that indicates that significant user data is not present in any of the defective area and the substitute area.

The technique, as disclosed in Russell, requires that a failed sector, containing bad data, is relocated and marked by setting an unusable bit. The data remains present in the sector, identified as unusable, until the unusable bit, not the user data, is cleared and then the sector is overwritten with good data. Therefore, Russell does not indicate defect status information indicating that significant user data in a defective area and a substitute area is not present after physical reformatting of the information recording medium, as required in claim 12. Therefore, Russell does not teach or suggest the features of claim 12.

Claim 13, which recites a process for recording the attribute of the defect status information that indicates significant user data is not present in any of the defective area and the substitute area as a result of physical reformatting of the information recording medium, is distinguished from Russell for at least the same reasons as discussed for claim 12 above.

Claim 14, which recites a device for recording information includes the initialization processing module, which overwrites the defect status information with an attribute indicating that significant user data is not present in any of the defective area and the substitute area as a result of physical reformatting upon receiving an execution instruction of physical reformatting of the information recording medium. Thus, claim 14 is distinguished from Russell for at least the same reasons as discussed for claim 12 above.

S/N 10/559908

In response to the Office Action dated October 14, 2009

Claims 15 and 16, which depend from claim 14, are distinguished from Russell for at least the same reasons as discussed for claim 12 above.

Accordingly, this rejection should be withdrawn.

35 U.S.C. 103 Rejections

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Russell (U.S. Patent No. 6,327,679) in view of Kulakowski et al. (U.S. Patent No. 5,303,219). Applicant respectfully traverses this rejection.

Claim 16, which depend from claim 14, is distinguished from Russell for at least the same reasons as discussed above.

Kulakowski discloses a method of identifying sectors having defects on an optical disc (see abstract). Kulakowski, however, does not remedy the deficiencies of Russell, and this rejection should be withdrawn.

In view of the above, Applicant requests reconsideration of the application in the form of a Notice of Allowance.

If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.



Dated: January 14, 2010

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &  
LARSON, P.C.  
P.O. Box 2902  
Minneapolis, MN 55402-0902  
(612) 455-3800

By: 

Douglas P. Mueller  
Reg. No. 30,300  
DPM/llf